**Assignment Name – MongoDB**

**Problem Statement –**

1. What are the different libraries which helps to connect R with MongoDB?

There are 3 packages to connect with MongoDB. They are

* RmongoDB – The connection details will be like below –
  + - *host <- "someone.com:10200"*
    - *username <- "myuser"*
    - *password <- "mypassword"*
    - *db <- "testdatabase"*
    - and the connecting to mongo shell is like - *mongo <- mongo.create(host=host , db=db, username=username, password=password)*
* Rmongo
* > library("RMongo")
* mongo < - mongoDbConnect("db")
* Mongolite is also another package – Currently the R 3.5 version supports Mongolite package.
* Compared to RmongoDB , Rmongo is very straight forward and user-friendly.

1. Explain data storage hierarchy in MongoDB in simple words?

**The dataStorage hierarchy is as below -**

* + **0 or more database – this is the top most level in mongoDB , where every instance of mongoDB can have 0 or more Databases.**
  + **Every Database can have 0 or more collections. Collection is similar to the tables in the SQL.**
  + **Every Collection can have 0 or more documents.**
  + **Every Document can have 0 0r more key value pairs. The key values pair are the least unit in the MongoDB.The actual data is stored in the form of key – value pairs.**

1. Write a query in R and python to store data from R/python to MongoDB



**for python we use pymongo package to perform mongodb operations –**



1. Why do we call MongoDB as Schema less database?

**Since the Data is stored in the JSON format and they are not stored in the form of structure that is having well defined schema. The data is also stored in the form of key values pair.**

5. What is the syntax (we write in command line after we initialize mongo.exe) to create

a collection and to drop a collection in MongoDB?

>>db.create.collection(name,option) /\*\*create a collection\*\*/

Ex: db.createCollection("students")

Output: { "ok" : 1 }

>>db.COLLECTION\_NAME.drop()

Ex: >db.mycollection.drop()

**Output :** true